

ABSTRACT

A process for repairing a multi-layer coating of a substrate, in particular, vehicles having a blemished area, comprising the following successive steps:

- 5 A) optionally, preparing the blemished area in a conventional manner,
- B) sanding the blemished area and the transitional zone between the blemished area and the intact existing coating,
- C) optionally, cleaning the sanded surface (= repair surface),
- D) applying a pigmented water-based or solvent-based base coat onto
- 10 the sanded and optionally cleaned repair surface and fading out into the areas of the intact existing coating,
- E) applying the two-component aqueous clear coat based on an OH-functional binder and a polyisocyanate crosslinking agent at conventional spraying viscosity onto the base coat,
- 15 F) fading out into the areas of the intact existing coating, which border the surface coated with the base coat, with the aqueous clear coat material, wherein the aqueous clear coat in step F) exhibits the same spraying viscosity as the aqueous clear coat applied in step E) or alternatively after step C),
- 20 E1) applying a two-component aqueous pigmented one-layer top coat based on an OH-functional binder and a polyisocyanate crosslinking agent at conventional spraying viscosity onto the repair surface,
- F1) fading out into the areas of the intact existing coating which border
- 25 the repair surface with the aqueous pigmented one-layer top coat material, wherein the aqueous pigmented one-layer top coat in step F1) exhibits the same spraying viscosity as the aqueous pigmented one-layer top coat applied in step E1),
- G) curing the resultant coating comprising base coat and clear coat
- 30 and optionally,
- H) sanding the cured coating and polishing the sanded area.